No. 200100218

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Monsanto Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF TH... (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'Dumas'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twelfth day of September, in the year two thousand one.

Attest:

Paul M. Jabrouck

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Ann M. Veneman

Secretary of Agriculture

Local Reproduction of FORM - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the privacy Act of 1974 (5 U.S.C. 552a)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421) Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
Monsanto Company

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER
W95-385

3. VARIETY NAME
Dumas

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
700 Chesterfield Parkway North
St. Louis, Missouri 63198

5. TELEPHONE *(include area code)*
636-737-6089

636-737-7250

PVPO NUMBER
200100218

FILING DATE
June 11, 2001

7. GENUS AND SPECIES NAME
Triticum aestivum

8. FAMILY NAME *(Botonical)*
Gramineae

FEES RECEIVED
FILING AND EXAMINATION FEE
6/11/2001

9. CROP KIND NAME *(common name)*
Hard Red Winter Wheat

DATE
2705.00

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association,etc.) (common name)*
Corporation

CERTIFICATION FEE
320

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
Delaware

12. DATE OF INCORPORATION
1933

DATE
9/7/01

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Ms. Sally Metz
700 Chesterfield Parkway North
St. Louis, Missouri 63198

AND

Dr. Rollin Sears
6515 Ascher Road
Junction City, Kansas 66441

14. TELEPHONE *(include area code)*
636-737-6089

15. FAX *(include area code)*

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(follow instructions on reverse)*

- a. [X] Exhibit A. Origin and Breeding History of the Variety
- b. [X] Exhibit B. Statement of Distinctness
- c. [X] Exhibit C. Objective Description of the Variety
- d. [X] Exhibit D. Additional Description of the Variety
- e. [X] Exhibit E. Statement of the Basis of the Applicant's Ownership
- f. [X] Voucher Sample *(2,500 viable untreated seeds, or, for tuber propagated varieties veification that tissue culture will be deposited and maintained in a public repository)*
- g. [X] Filing and Examination Fee *($2,450)*, made payable to "Treasurer of the United States" *(Mail to PVPO)*

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*

[X] YES *(if "yes", answer items 18 and 19 below)* [ ] NO *(if "no", go to item 20)*

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

[ ] YES [X] NO

19. IF 'YES' TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDERS SEED?

[ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?

[ ] YES *(if "YES", give names of countries and dates)* [X] NO

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s))		SIGNATURE OF APPLICANT (Owner(s))	
Sally G Metz			
NAME *(Please print or type)* Sally Metz		NAME *(Please print or type)*	
CAPACITY OR TITLE Director Wheat Technology	DATE 21 May 2001	CAPACITY OR TITLE	DATE

SD-470 (04-95)

(See reverse for instructions and information collection burden statement)

Exhibit A.
Origin and Breeding History of Dumas

Dumas was an F3 derived, single plant selection from the cross 84PYI002-261 [F2 SPS 102 (bulk selection) / TAM W-101] / 84PDO007-161 (RPB77-56 / MUSTANG // W80-425) // N84-0758 / W81-297-3 (Stallion sib).

F2 SPS 102 is an F2 derived plant selection from a nursery grown at Hutchinson, Kansas in 1976. The selection was based on survival of a severe level of winterkill and soilborne mosaic virus. The pedigree of F2 SPS 102 is unknown. In 1980 a cross (designated 80x559) was made between F2 SPS 102 and TAM W-101. An F3 derived plant selection from this cross was made in 1983 based on head fertility, soilborne resistance and absence of foliar disease. This selection was given the designation 84PYI002-261.

In 1980, another cross (designated 80x862) was made between an elite breeding line, RPB77-56, (from Rothwell Plant Breeders, UK) and Mustang. The F1 from this cross was crossed to W80-425 which was an AgriPro breeding line that was an F2 derived plant selection (designated F2 SPS 9) made in Berthoud, CO in 1978 based on short plant height and excellent head fertility. The pedigree of F2 SPS 9 is unknown. An F3 derived single plant selection from this cross was made in 1983 based on good fertility and the absence of disease in Hutchinson, KS. This selection was designated 84PDO007-161.

In 1985 a cross was made between an elite AgriPro spring wheat, N84-0758, and W81-297-3 (Stallion sib). N84-0758 is an F4 single plant selection from a three-way cross made in 1981 between two Minnesota breeding lines, MN7125 and MN69124 and a Pioneer line 2360. N84-0758's pedigree is as follows: MN7125 / MN69124 // 2360. An F3 single plant selection was made from the N84-0758 / W81-297-3 population in Berthoud, CO based on head fertility and the absence of disease in 1987 and subsequently designated WI89-483.

In 1986 a cross was made between 84PYI002-261 and 84PDO007-161. In 1988 an individual F3 plant selection was made in Berthoud, CO based on head fertility and the absence of disease. This line was subsequently designated WI90-425.

The final cross WI90-425 / WI89-483 was made in 1990 and the plant selection based upon plant height, fertility and the absence of leaf rust was made in Berthoud, Colorado in 1993. The resulting F4 plant row was tested in preliminary yield trials in 1994 and given the experimental designation Dumas. Dumas has been tested as a pure-line in replicated trials in 1995, 1996, 1997, 1998 and 1999. These replicated trials represent a broad geographic area in the Hard Winter Wheat region.

In 1996, 48 head-rows were grown in Berthoud, Colorado and evaluated for phenotypic similarity. Twelve rows, phenotypically similar for plant height and maturity, were harvested individually and grown in Berthoud, Colorado in 1997 as progeny rows. Eleven of these progeny were selected based on phenotypic similarity for plant height and height uniformity within row. These rows were harvested, bulked and grown on a 0.2 acre seed increase in 1998 which produced 825 pounds of seed. This seed was planted to a 5.0 acre increase in Hereford, Texas in 1999 producing 31,250 pounds of seed.

Dumas has been uniform and stable since 1998. About 0.8% of the plants were rogued from the initial Breeders seed increase in 1998. Approximately 90% of the rogued variant plants were taller height wheat plants (5 to 15 cm). Up to 1% variant plants may be encountered in subsequent generations.

Exhibit B.
Statement of Distinctness

Dumas is most similar to the hard red winter wheat 'Abilene'. However, it can be easily distinguished by the following morphological characteristics:

- Dumas has a green plant color at boot stage (R.H.S. Color Chart No. 137B; Berthoud, Colorado 1998 and 1999). Abilene has a blue-green plant color at boot stage (R.H.S. Color Chart No. 122B; Berthoud, Colorado 1998 and 1999).

- Dumas has a recurved flag leaf at boot stage (Berthoud, Colorado 1998 and 1999). Abilene has an erect flag leaf at boot stage (Berthoud, Colorado 1998 and 1999).

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY

WHEAT (*Triticum* Spp.)

NAME OF APPLICANT(S)	FOR OFFICIAL USE ONLY
Monsanto Company	PVPO NUMBER **Dumas**
ADDRESS (*Street and No. or R.F.D. No., City, State, and Zip Code*) **700 Chesterfield Parkway North** **St. Louis, Missouri 63198**	NAME OR EXPERIMENTAL DESIGNATION **W95-385**

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in the first box when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be ba minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or standard may be used to determine plant colors; designate system used.
Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

[1] 1=Common 2=Durum 3=Club 4=Other (*specify*) _____

2. VERNALIZATION:

[2] 1=Spring 2=Winter 3=Other (*specify*) _____

3. COLEOPTILE ANTHOCYANIN:

[1] 1=Absent 2=Present

4. JUVENILE PLANT GROWTH:

[2] 1=Prostrate 2=Semi-erect 3=Erect

5. PLANT COLOR (*boot stage*):

[2] 1 = Yellow-Green 2 = Green 3 = Blue-Green

6. FLAG LEAF (*boot stage*):

[2] 1 = Erect 2 = Recurved

[2] 1 = Not Twisted 2 = Twisted

7. EAR EMERGENCE:

[0][2] Number of Days Earlier Than **Ogallala** *

[ ][ ] Number of Days Later Than _____ *

8. ANTHER COLOR:

[1] 1 = YELLOW 2 = PURPLE

9. PLANT HEIGHT (*from soil to top of head, excluding awns*):

[0][2] cm Taller Than **Coronado** *

[ ][ ] cm Shorter Than _____ *

* Relative to a PVPO-Apprved Commercial Variety Grown in the Same Trial

200100218

10. STEM:

A. ANTHOCYANIN

[1] 1= Absent 2=Present

B. WAXY BLOOM

[2] 1=Absent 2=Present

C. HAIRINESS (*last internode of rachis*)

[2] 1=Absent 2=Present

D. INTERNODE (*specify number*) _____

[1] 1=Hollow 2=Semi-solid 3=Solid

E. PEDUNCLE

[1] 1=Erect 2=Recurved

[3][2] cm Length

11. HEAD (*at Maturity*):

A. DENSITY

[2] 1=Lax 2=Middense 3= Dense

B. SHAPE

[1] 1 = Tapering 2= Strap 3 = Clavate 4 = Other (*specify*) _____

C. CURVATURE

[2] 1 = Erect 2 = Inclined 3 = Recurved

D. AWNEDNESS

[4] 1 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned

12. GLUMES (*at Maturity*):

A. COLOR

[1] 1 = White 2 = Tan 3 = Other (*specify*) _____

B. SHOULDER

[2] 1 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate

C. BEAK

[3] 1 = Obtuse 2 = Acute 3 =Acuminate

D. LENGTH

[1] 1 = Short (ca. 7mm) 2 = Medium (ca. 8mm) 3 = Long (ca. 9mm)

E. WIDTH

[3] 1 = Narrow (ca. 3mm) 2 = Medium (ca. 3.5mm) 3 = Wide (ca. 4mm)

13. SEED:

A. SHAPE

[1] 1 = Ovate 2 = Oval 3 = Elliptical

B. CHEEK

[1] 1=Rounded 2=Angular

C. BRUSH

[2] 1=Short 2=Medium 3=Long

[1] 1 = Not Collared 2 = Collared

D. CREASE

[1] 1 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel

[1] 1 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

13. SEED: (continued)

E. COLOR

[3] 1 = White 2 = Amber 3 = Red 4 = Other (*specify*) _____

F. TEXTURE

[1] 1=Hard 2=Soft

G. PHENOL REACTION (*see instructions*):

[-] 1 = Ivory 2 = Fawn 3 = Light Brown 4 = Dark Brown 5 = Black

14. DISEASE: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

[3]	Stem Rust (*Puccinia graminis* f. sp. *tritici*) Field races	[3]	Leaf Rust (*Puccinia recondita* f. sp. *tritici*) Field races
[0]	Stripe Rust (*Puccinia striiformis*)	[0]	Loose Smut (*Ustilago tritici*)
[3]	Tan Spot (*Pyrenophora tritici-repentis*)	[0]	Flag Smut (*Urocystis agropyri*)
[0]	Halo Spot (*Selenophoma donacis*)	[0]	Common Bunt (*Tilletia tritici or T. laevis*)
[0]	*Septoria nodorum* (Glume Blotch)	[0]	Dwarf Bunt (*Tilletia controversa*)
[0]	*Septoria avenae* (Speckled Leaf Disease)	[0]	Karnal Bunt (*Tilletia indica*)
[3]	*Septoria tritici* (Speckled Leaf Blotch) Field races	[3]	Powdery Mildew (*Erysiphe graminis* f. sp. *tritici*) Field races
[0]	Scab (*Fusarium* spp.)	[0]	Snow Molds
[0]	Black Point (Kernel Smudge)	[0]	Common Root Rot (*Fusarium, Cochliobolus* and *Bipol*
[0]	Barley Yellow Dwarf Virus (BYDV)	[0]	Rhizoctonia Root Rot (*Rhizoctonia solani*)
[3]	Soilborne Mosaic Virus (SBMV) Field	[0]	Black Chaff (*Xanthomonas campestris* pv. *translucens*
[3]	Wheat Yellow (Spindle Streak) Mosaic Virus Field	[0]	Bacterial Leaf Blight (*Pseudomonas syringae* pv. *syrin*
[3]	Wheat Streak Mosaic Virus (WSMV) Field	[ ]	Other (*specify*)
[ ]	Other (*specify*)	[ ]	Other (*specify*)
[ ]	Other (*specify*)	[ ]	Other (*specify*)
[ ]	Other (*specify*)	[ ]	Other (*specify*)

15. INSECT: (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Intermediate; 4=Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

1	Hessian Fly (*Mayetiola destructor*)		Other (*specify*)
0	Stem Sawfly (*Cephus* spp.)		Other (*specify*)
0	Cereal Leaf Beetle (*Oulema melanopa*)		Other (*specify*)
0	Russian Aphid (*Diuraphis noxia*)		Other (*specify*)
0	Greenbug (*Schizaphis graminum*)		Other (*specify*)
0	Aphids		

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

Exhibit D.
Additional Description of Dumas

Dumas is a hard red winter wheat bred and developed by Agripro Wheat. Dumas is a medium short variety with strong straw and early maturity. Dumas is moderately resistant to leaf and stem rust and Soilborne mosaic virus. ~~vrus.~~ Dumas is moderately susceptible to Powdery mildew, Wheat Streak mosaic virus and Spindle streak mosiac virus.

MAI 7-19-2001

Juvenile growth habit is semi-erect. Seedling anthocyanin is present. Plant color at boot stage is green. Auricle anthocyanin and auricle hairs are present. Flag leaf at boot stage is recurved and twisted. Waxy bloom is present on the head, stem and flag leaf sheath. Anther color is yellow. Head shape is tapering and awned. Glumes are glabrous, wide in width and short in length with oblique shoulders and acuminate beaks. Seed shape is ovate. Brush hairs are medium in size. Seed crease depth is shallow and width is narrow. Seed cheeks are rounded.

Dumas is well adapted to the states of Oklahoma, Kansas, Colorado, Nebraska and Texas.

AGRIPRO WHEAT

Plains Team Quality Summary

Year-Loc	Wht Prot	Flr Prot	R	Norris Hard	Flr Yld	R	Ash	Mixogram Peak Time	Mixogram Peak Ht	Mixogram Tol.	R	Mixogram Abs	R	Baking Quality Mix Time	R	Baking Quality Loaf Vol	R	Crumb Grain	Crumb Tex	Crumb Color	Over All	Comments
	14%mb	14%mb	R		%	R		min	N.U.	mm	R	%	R	min	R	cc	R	R	R	R	R	
W95-385																						
1995 - GK	13.0	11.4	5	60	71.2	3		4.00	5.0	1244	4	63.0	5	4.00	3	760	5	5	2	3	48	
1996 - GK	13.1	11.9	5	66	73.2	2		4.00	5.0	1044	5	62.0	5	4.00	1	1085	4	6	3	3	50	
1997 - GK		13.5		140	56.9			4.25	5.0	1115		64.0										
1997 - SK	11.8	10.6	3	64	73.6	2	0.356	3.50	5.0	900	5	60.0	4	3.50	3	695	4	5	2	3	43	
1998 - SK	12.5	11		98	71.0		0.342	4.00	5.0	1147		63.0		4.00		950		4	3	2		H
1999 - QK	12.1	10.9		69	73.0		0.460	4.50	4.5	1173		60.0		4.50		770		3	2	2		
1999 - SK	11.6	10.4		61	71.5																	
Average	**12.4**	**11.4**	**4**	**80**	**70.1**	**2**	**0.386**	**4.04**	**4.9**	**1104**	**5**	**62.0**	**5**	**4.00**	**2**	**852**	**4**	**5**	**2**	**3**	**47**	
HAWK																						
1995 - GK	13.1	11.8	5	57	68.9	4		5.50	5.0	1334	4	63.0	5	5.50	1	780	5	4	2	3	45	
1996 - GK	13.4	12.1	4	73	72.1	3		4.25	5.0	1301	3	62.0	5	4.25	1	1035	4	3	2	3	37	
1997 - GK		13.4		122	57.9			5.00	5.0	994		68.0										
1997 - SK	11.1	10	4	70	72.2	3	0.422	4.00	5.0	1148	3	59.0	5	4.00	1	620	5	6	4	4	48	
1998 - SK	10.5	9.2		82	72.3		0.414	4.00	4.5	1158		60.0		4.00		940		3	4	4		
1999 - QK	12.7	11.4		56	69.5		0.452	4.50	5.0	1109		61.0		4.50		820		4	2	2		
1999 - SK	11.5	10.2		69	72.3																	
Average	**12.1**	**11.2**	**4**	**76**	**69.3**	**3**	**0.429**	**4.54**	**4.9**	**1174**	**3**	**62.2**	**5**	**4.45**	**1**	**839**	**5**	**4**	**3**	**3**	**43**	

Ratings 1-2:Excellent 3-4=Good 5-6=Acceptable 7-8=questionable 9=unacceptable

Friday, December 10, 1999

Var./Line	Heading	Maturity	Coleoptile	Height	Straw Strength	Leaf Rust Severity	Leaf Rust Reaction	Stem Rust Severity	Stem Rust Reaction	Powdery Mildew	Hessian fly	WSMV	SBMV	SSMV
DUMAS	4	3	3	3	3	1	3	3	3	6	7	6	3	6
TAM 107	3	3	3	4	4	9	9	5	6	2	8	3	8	6

Data generated in 1995:

Colorado - Yield, Test Wt., Heading, Height, Leaf Rust, Stem Rust, Tan Spot, Lodge Severity, Powdery mildew, Hessian fly, Aluminum tolerance (Lab Screen), Coleoptile length
Goodland, KS - Yield, Test Wt., Lodge Severity, Mill & Bake
Beloit, KS - Tan Spot
Salina, KS - Yield, Test Wt., Heading, Height, Leaf Rust, Septoria
Everest, KS - Winterkill, Spindle Streak, Soilborne
Saint John, KS - Spindle Streak
Dumas, TX - Test Wt., Shatter, Leaf Rust
Wichita, KS - Leaf Rust, Septoria, Tan Spot

Data generated in 1996:

Colorado - Yield, Test Wt., Heading, Pollination, Maturity, Height, Leaf Rust & Tan Spot (greenhse screening), Powdery Mildew, Hessian fly, Coleoptile length, Aluminum Tolerance (Lab screening)
Imperial, NE - Yield, Test Wt., Heading, Height, Lodging
Geneva, NE - Winterkill
Salina, Everest, KS - Yield, Test Wt. Winterkill, Maturity
Goodland, KS, Nardin, OK - Yield, Test Wt., Maturity, Mill & Bake
Goodland, KS (Irrigated) - Yield, Test Wt., Winterkill, Lodging, Septoria, Wheat Streak
Garden City, KS - Winterkill, Maturity
Hays, KS - WSMV (Visual screening).
Enid, OK - Aluminum Tolerance

Data generated in 1997:

Colorado - Yield, Test Wt., Heading, Height, Leaf Rust, Lodge Severity, Powdery mildew, Hessian fly, Aluminum tolerance, Coleoptile length
Goodland, KS, Hugoton, KS - Yield, Test Wt.
Beloit, KS - Yield, Test Wt., Leaf Rust, Tan Spot
Salina, KS - Yield, Test Wt., Heading, Leaf Rust, Septoria, Mill & Bake
Quinter, KS - Yield, Test Wt., Leaf Rust, Tan Spot, Lodge Severity
Haven, KS - Yield, Test Wt., Leaf Rust, Lodge Severity, Shatter
Enid, OK - Aluminum Tolerance
Nardin, OK - Heading, Maturity, Leaf Rust, Septoria
Vernon, TX - Leaf Rust
Paxton, NE - Winterhardiness
Geneva, NE - Yield, Test Wt., Leaf Rust, Green Leaf Retention

Data generated in 1998:

Colorado - Yield, Test Wt., Heading, Maturity, Height, Lodge Severity, Powdery mildew, Coleoptile length
Goodland, KS - Yield, Test Wt., Heading, Spring Growth
Beloit, KS - Yield, Test Wt., Leaf Rust, Tan Spot, Maturity, Lodge severity
Salina, KS - Yield, Test Wt., Height, Maturity, Mill & Bake
Quinter, KS - Yield, Test Wt., Heading, Lodge Breakage, Spring Growth
Hugoton, KS - Yield, Test Wt.
Haven, KS - Yield, Test Wt., Maturity, Powdery Mildew
Enid, OK - Aluminum Tolerance
Nardin, OK - Yield, Test Wt., Leaf Rust, Tan Spot, Septoria
Paxton, NE - Yield, Test Wt.
Hereford, TX - Yield, Test Weight
MacGregor, TX - Leaf Rust, Maturity

Data generated in 1999:

Colorado - Yield, Test Wt., Heading, Height, Maturity, Lodge Severity,
Otis, CO - Yield, Test Wt.
Goodland, KS - Winterkill, Spring Growth
Salina, KS - Yield, Test Wt., Soil Borne
Quinter, KS - Yield, Test Wt., Mill & Bake
Hugoton, KS - Yield, Test Wt.
Haven, KS - Spindle Streak
Manhattan, KS - Soil Borne
Wichita, KS - Soil Borne, Spindle Streak
Paxton, NE - Yield, Test Wt.
Bruning, NE - Yield, Test Weight, Winterkill, Maturity, Leaf Rust, Septoria,
MacGregor, TX - Leaf Rust, Maturity
Hays, KS - WSMV (Visual screening).

Note: Rankings in this table represent the average for a given trait on a 1-9 scale where 1 and 9 represent the extremes for the repective traits.

Trait	1	9
Heading	early	late
Maturity	early	late
Coleoptile	long	short
Height	short	tall
Straw Strength	strong	weak
All disease & insect ratings	resistant	susceptible

20/00218

Yield Summary Over-years by Region and State

		Yield (Bu/A)	
Region	Locs	W95-385	HAWK
Continuous	17	60.6	52.1
Irrigated	9	106.4	103.0
Dryland	15	67.0	56.7
State			
Colorado	8	105.6	102.4
Kansas	23	61.6	56.4
Nebraska	6	74.7	62.1
Oklahoma	3	47.3	32.4
Texas	1	70.8	75.8
Overall	41	72.8	65.0

Yield Summary by Region and State

	1995 Yield (Bu/A)			1996 Yield (Bu/A)			1997 Yield (Bu/A)			1998 Yield (Bu/A)			1999 Yield (Bu/A)		
Region	Locs	W95-385	HAWK	Locs	W95-385	HAWK	Locs	W95-385	HAWK	Locs	W95-385	HAWK	Locs	W95-385	HAWK
Continuous	1	40.4	32.8	2	26.3	36.0	4	79.2	59.1	7	64.9	55.2	3	55.1	52.7
Irrigated	1	114.2	99.2	2	104.6	102.1	1	115.0	101.5	3	81.9	87.5	2	136.7	129.9
Dryland	1	77.0	51.8	1	43.8	40.9	3	75.0	59.8	4	60.5	49.1	6	69.7	63.7
State															
Colorado	1	114.2	99.2	1	116.7	122.8	1	115.0	101.5	2	87.5	93.3	3	108.0	103.0
Kansas	2	58.7	42.3	2	34.1	42.1	6	80.8	63.2	8	59.9	54.6	5	65.3	62.7
Nebraska	-	-	-	1	92.4	81.4	1	56.9	36.7	1	102.8	77.4	3	65.4	59.0
Oklahoma	-	-	-	1	28.2	28.6	-	-	-	2	56.9	34.3	-	-	-
Texas	-	-	-	-	-	-	-	-	-	1	70.8	75.8	-	-	-
Overall	3	77.2	61.3	5	61.6	63.4	8	82.1	64.7	14	67.3	60.4	11	77.0	73.0

Exhibit E.
Statement of the Basis of Applicant's Ownership

The variety for which Plant Variety Protection is hereby sought was developed by Dr. John Moffatt, an employee of AgriPro Wheat, a business unit of Advanta USA. By agreement between employees and AgriPro Wheat, all rights to any invention, discovery, or development made by the employee while employed by AgriPro Wheat, were assigned to AgriPro Wheat with no rights of any kind pertaining to 'Dumas' being retained by the employees.

By contractual agreement the variety 'Dumas' was purchased from AgriPro Wheat, a business unit of Advanta USA in June of 1996 and is currently owned by Monsanto Company.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR [illegible] NUMBER	3. VARIETY NAME
Monsanto Company	W95-385	Dumas

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)
700 Chesterfield Parkway North St. Louis, Missouri	636-737-6089	636-737-7250

7. PVPO NUMBER: 200100218

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? [X] YES [ ] NO
If no, give name of country

10. Is the applicant the original owner? [ ] YES [X] NO *If no, please answer one of the following:*

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?
[ ] YES [ ] NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?
[X] YES [ ] NO If no, give name of country

11. Additional explanation on ownership *(if needed, use reverse for extra space)*:

Please see following page.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.